Paper topic: *Role of mobile wallets in creating opportunities and transforming lives in rural households*

Introduction

There is an old saying in my part of the world."If you want to change the fate of a village, build a road through it." I believe this to be universal and applicable to all countries of the world especially the underdeveloped ones.

This is evident in the world's most developed economies. The railroads in the 18th century in the US and the road network in the 19th century proved to be the primary driver of growth and creation of jobs and economic opportunities. Agricultural produce could move to the markets quickly and cost effectively and raw material could move to the industries. The communication infrastructure proved to be the driver of economic growth and prosperity.

Countries in our part of the world missed out on that development phase for a variety of reasons. Today, the cost of undertaking development of such massive infrastructure is prohibitive enough to be out of reach for the poorer nations. However, at the same time we have a great equalizer in the form of the modern communication revolution through cellular phones or mobile phones. This technology has the real potential of the great equalizer. Villages and rural towns may not be connected on the road or rail network but already have cellular connection. It has democratized communication for the masses like Fords model T did for the car ownership for the middle class.

It has freed up the skilled worker but elavatinghim above the need for a fixed location or a middleman to sell his or her services and made him directly available to the end customer.

Mobile Banking and Payment Services through mobile wallet is the great big extension to the mobile phone revolution. It not only allows the financial services to be provided to the marginalized classes, but also gives them the financial empowerment to build their own safety nets through specialized products being targeted for their consumption.

Prahalad in Fortune at the Bottom of the Pyramid, xxxx 200x has put forth a very strong argument for building a win-win partnership with the disenfranchised. The novel idea here is the win-win partnership and not a one sided exploitative relationship.

I have attempted in this paper to talk about three things:

- The business case for commercial banks to venture in addressing the mass-market space and how doing this can bring about prosperity to banks and the target market they are hoping to serve.
- The paradigm shift required to effectively reach out to these markets and technology as the great enabler in the process.
- Some success stories from around the world and how they have benefitted the parties involved.

Need for Access to Finance

Just like a road connects a village to the rest of the country and open up a myriad of options, Access 2 Finance is the gateway to a range of financial services that can open up a new plethora of choices for the individuals and households.

Traditional banking models have proven inadequate to reach out to the masses especially in the underdeveloped and developing countries. The Alliance for Financial Inclusion estimates that 2.5 Billion do not have access to a savings account and other financial services.Some of the reasons that the traditional banks have been unable to reach out to these unbanked segments are

Myth- Poor people do not save

Managers at commercial banking institutions believe, though erroneously, that poor people are "too poor to save" and they prefer to consume instead.

Research has proven time and again that saving is central to poor peoples economic management strategies. Poor save to build safety nets for themselves against emergencies like disasters, accidents and health related issues. They also save to buy big-ticket items or big events like marriage, education etc.

Myth- Low usage means low demand

Since most of the poor people don't have saving accounts and are not part of the formal financial sector, managers at FI assume that they do not require such services.

Evidence on the other hand suggests an enormous market for deposit services among poor customers. In Bosnia Gallup International (2003) survey found that almost 40 percent of survey respondents indicated that they wanted, but did not have access, to a savings account. In a World Bank Survey (2003) demand for interest bearing accounts was almost unanimous among the unbanked population.

Traditional financial institutions working on the existing paradigms are unable to address these Bottom of the Pyramid customers. The delivery models as well as the cost structures are not geared towards low value high margin dispersed customers. Traditional channels like Branches, ATM etc are too expensive to deploy and are not in sync with the demands of these segments of customers, Internet Banking as a channel is cost effective for volumes but is not the appropriate technology for these segments.

In order to service these customers, FIs need to re-evaluate their sales and service delivery paradigm. This fundamental shift to sales and service strategy has come about on the success of the most successful and democratic technology that became popular towards the turn of the last century, i.e. mobile phones. Mobile Phone based financial services and payment solutions provide the leverage to the financial institutions to deliver true value to the BOP segments. The combination of mobile technology and agent based/retail banking agents have proven tremendously successful in a variety of markets like Brazil, Peru, Nigeria, Kenya, Philippines, Uganda, DRC, Zambia, South Africa and now in Pakistan.

A timeline for some of the successful mobile wallet solutions is presented in Table 1 below

2000	Philippines
2001	South Africa (Fundamo)
2003	Zambia (powered by Fundamo)
2004	2nd in Philippines
2004	Japan
2004	Democratic Republic of Congo (Fundamo solution expanded)
2005	South Africa: MTN and Standard Bank introduce Mobile Money (Fundamo based)
2005	2nd in South Africa
2006	GSMA forms Mobile Money Transfer (MMT) working group
2007	India (with remittance)
2007	Kenya - M-Pesa
2007	GSMA partners with MasterCard and Western Union to provide remittance payment hub
2007	GSMA appoints Accenture to put together a Mobile Wallet Pilot program and selects
	Fundamo as the technology
2008	GSMA announces the Market Acceleration Programme
2008	Accenture announce the Accenture Mobile Wallet pilot program based on Fundamo
2008	MTN Mobile Money starts a 20 country role out (Fundamo Wallet Solution)

2009	Pakistan – EasyPaisa (Fundamo Wallet)
2010	Nepal - NIBL Mobile Wallet (Fundamo Technology)

What do the poor want

The key elements of a financial product for Poor are

- Accessibility
- Affordability
- Liquidity
- Security

Accessibility of the services is a key consideration for the poor. If they have to travel some distance and incur time and money costs in accessing the financial services, they will be challenged to use such services. This is a key factor in poor not utilizing formal banking channels. Another accessibility issue is the mindset or comfort level in visiting the facilities offering the financial products. Poor people are intimidated by nicely built office and branches and the security guards deployed at such places.

Affordability is more about perceived cost. Data suggests that, the poor are willing to pay or incur negative returns in order to utilize saving services. They look at not just the cost of services, but also the qualification criteria. If a person is earning Rupees 3000 a month and does not have the minimum account balance requirement of 5000 Rupees, they will forgo a high interest bearing account and instead pay money to have their savings collected by an agent.

As discussed earlier in this paper, poor people are mostly saving to meet emergencies and for important purchases or events. This means they need the ability to make small frequent deposits and large infrequent withdrawals. In case of emergencies the depositors requires that they should be able to liquidate and withdraw their savings instantly at the moment of their dire need.

Security of funds is critical for all depositors regardless of their class. However, it is even more important for poor people. They usually don't have access to regulated financial institutions where there is any kind of regulation and supervision and security for their monies. Mostly they are keeping their savings under the mattress, which carries high risk of theft or destruction in case of any calamities.

How Mobile Wallets create opportunities

A critical part of the mobile wallet strategies is the agent network required to service the customers near their place of business or residence. The ability to transact close at home is a critical part of enabling access to finance to the masses. It cuts the cost of traveling to operate the account and makes the account readily accessible for extended hours. It allows the banks to forgo investment in building branch network and piggyback on top of the existing retail network.

The creation of agents spurs economic activity in the local market. The agents earn commissions and service charges from the financial intermediation function on behalf of the bank. Since the agent accounts are mostly funded and the banks are class A Financial institutions subject to strict financial regulations and actively supervised by the central bank, the incidences of frauds are minimized and safety of the deposits is ensured.

Since the banks usually have higher overheads and costlier employees compared to agents, the cost of transactions is substantially brought down for the end customers.

The BOP customers feel more comfortable in visiting these agents' shops for their financial services needs then bank branches where they feel intimidated and unwelcomed.

Once the trust factor is established there is a major shift in the saving pattern of the poor. As we have established above that poor do save, they are able to move their savings from under the mattress, group savings, or informal deposit collectors to a formal bank account.

The bank account allows the BOP customers to build financial history with regulated banks. The banks can offer financials products like life and health insurance, livestock and agriculture insurance targeted towards these customers and packaged in such a way that it becomes attractive to such segments.

As we had earlier established, the poor save for two primary reasons - In order to meet emergencies and to buy big ticket items or spend on major events like marriage etc. The insurance products take care of one out of the two major reasons for savings thus leaving more funds to invest in buying big-ticket items like livestock or land etc. Investment in productive assets leads to increase in income and a virtuous cycle is started which can eventually lead to emancipation from poverty.

Examples from other regions

I would like to share some of the examples from other market where branchless banking has transformed lives.

Pakistan – Easy Paisa by Telenor and Tameer

EasyPaisa is the latest in the chain of big branchless banking projects in the world. Launched only in October 2009, merely three months ago, it has created a huge stir in a country of 170 million. EasyPaisa has launched two products for customer convenience, a bill collection service and a domestic money remittance product.

Bill Collection has been quite successful, though it is still in its early days. The customer pays a charge for paying bill at EasyPaisa agent outlet compared to free bill collection at over 8,000 bank branches across Pakistan. This is a very strong statement of preference for the poor to pay for services if they feel that it delivers value in terms of cost and/or time savings for them or saves them from humiliation at the bank branches.

The second service to follow was the domestic money transfer facility open to all and sundry irrespective of their network. Previously people will go to a truck stand or an intercity bus stop and give money to a driver going towards their village. The driver will go to the village and hand over the list of recipient and cash to another villager who will then disperse funds. This is not only an expensive process but also very time consuming and there are substantial risks to the funds being stolen on the way by highway robbers. EasyPaisa money transfer has become an instant hit due to the fact that the money can be transferred to anywhere in the country and collected from any of the 4,000 + EasyPaisa Agents. The number of agents is projected at 20,000 by the end of 2010 according to Telenor.

The next product to be launched is the mobile wallet, which is expected to alter the financial inclusion levels drastically in a country with 170 million people, 93 million GSM connections and only 22 million Bank Accounts. Telenor and Tameer plan to sell insurance, Airtime and various other saving plans under the EasyPaisa mobile wallet program.

Brazil – Correspondent Banking

From rural outpost to boomtown: how banking services transformed a town in the Amazon

by Claudia McKay: Thursday, January 28, 2010

One might think that a small town in the heart of the Amazon basin would be the last place to need banking services. Yet during a visit to one such town, Autazes, I encountered a community that credits

banking services (via agents, termed banking correspondents in Brazil) with not only making life more convenient for its inhabitants but for sparking an economic boom. I was there in December 2009 as part of a research of agent networks (introduced in a previous blog post) which CGAP conducted along with the Center for Microfinance Studies at FGV (Fundação Getulio Vargas) and Planet Finance.
What do the inhabitants of this small town of 15,000 people (30,000 including surrounding communities) in the Amazon need banking services for? For starters, about 20% of the adult population of Autazes as well as about 40 surrounding communities receive regular government payments (pensions, social welfare payments, etc.). Before agents came to Autazes, the nearest bank was a 12 hour boat ride costing $20 away. Most people would give their cards and PIN numbers to men whose business it was to physically carry cash to and from Autazes. These funds were frequently lost or stolen. The merchants in town who needed to deposit cash went themselves as they didn't trust others with the large amounts. They would literally carry bags of cash on the boat and from the boat to the bank. Of course, anyone who did go to the city for financial transactions would also do their shopping there. It was safer to spend the money purchasing goods in the city – and bring all the merchandise back home by boat again – than bring the cash back to Autazes.
Life has changed dramatically in Autazes since 2002 when the first agent arrived. The thousands of people who before only had expensive, time-consuming and insecure ways to access money now have agents available to perform all their banking transactions. What is perhaps most surprising is the impact agents have had on the economic development of the town. As customers began receiving payments in Autazes, they naturally started spending this money in Autazes rather than traveling to the big city. Prior to agents, the few stores (less than 10) only offered basic groceries. Today, there are 36 retail stores offering a wide variety of products. The leaders of the community claim that a surge of recent development – growth in existing businesses, development of new businesses, a new road connecting Autazes with the city and a doubling of revenue collection for the town – all started with the introduction of agents. Autazes became the commercial and banking center of the region and is experiencing many additional benefits as a result.

The story of Autazes demonstrates that branchless banking not only improves the lives of individual customers but can foster economic growth for an entire community.

Kenya – M-PESA

Why has M-PESA become so popular in Kenya?

by Jim Rosenberg: Tuesday, June 17, 2008

Olga Morawczynski is a doctoral candidate at the University of Edinburgh. She has spent over 9 months investigating customer adoption and usage in both urban and rural Kenya. Below are some of her observations from the field.

It is early morning in Bukura, a small village in Western Kenya. The shop-keeper and his wife are preparing to open their small store, which sells household commodities such as flour and cooking oil. They also offer M-PESA services. There is already a queue outside. A group of about twenty villagers are crowding the entrance. "It is always like this," the shop-keeper complains while pointing to the crowd. "Since we have become M-PESA agents we have no time to rest. This thing has even over-run our other business". He then holds up a packet of sugar. "We have not sold any sugar in months. They only want M-PESA". Not just the Bukura agent has seen a great demand for M-PESA services. Since its introduction in March of 2007, the M-PESA application has had great success all over Kenya. There are currently over 2.3 million registered users. Over 18 Billion Ksh had been moved through the system, via person-to-person transfers.

Some of the work that I have been doing makes several arguments as to why M-PESA has become so popular. Firstly, it is the young, male, urban migrants who are driving the uptake of services – customer adoption. These migrants are what innovation researchers call 'early adopters' of a technology. They are usually better educated and earn higher incomes than those in the village. Because these migrants are the senders, they can choose the channel for money transfer. They then influence recipients in the rural area—who are usually female, less educated and poorer—to also use M-PESA. This segment is referred to as the 'technology laggards'. They are usually the last, and often the least likely, to adopt an innovation.

This research also notes some barriers to adoption. Both agents and customers complain of cash float problems, especially in the rural areas. Because the majority of transactions in the village are withdrawals, agents must maintain their cash float. They do this by making frequent trips to the bank. This can be problematic if the agent is not close to an urban centre, where most banks in Kenya are located. An agent in Malaha, a small village in Western Kenya, commented, "almost every day I ride my bicycle to Kakamega to top-up my float. This takes me almost three hours. I have to leave at 6am because I want to be there when the bank opens. I must then come back again and serve my customers". When asked if there was any other means of transport to Kakamega, the agent shook his head. He said that he was several kilometres away from the main road. He also said that he could not afford to pay the 200 ksh fee for the matatu (shared taxi).

Despite these cash float problems, the majority of customers in both the urban and rural areas assert that they prefer M-PESA over other money transfer services. This means that M-PESA must be offering them some kind of substantial benefit. In Bukura, this benefit comes in the form of savings on transport. Customers do not need to travel into Kakamega, the nearest town, to access the service. One elderly farmer commented that "I can just walk from my shamba (farm) and get money. I don't have to spend and go into town. If the agent does not have cash today, then I will come back tomorrow. It is cheaper to wait". Finding strategies to manage the cash float problem will undoubtedly be one of the greatest challenges for Safaricom. For now, however, it seems like customers are willing to accept the inefficiencies of the service. It is, after all, cheaper to wait.

Conclusion

It is safe to conclude that the access to financial services using mobile wallets can lead to transformation of lives for the Poor especially in the rural landscape. These are early days for Mobile financial services, but the facts are clearly pointing in the direction of the success of these models for financial empowerment.

The success of early models, despite all the pains and problems, is a positive indicator that these services are here to stay in the long turn and become mainstream as time passes. In fact we are seeing evidence that providing mobile channel for banking services to the banked market is leading to major cost savings for the banks involved and the customers are loving the independence and freedom of banking at will 24x7.

The early adopters are now paving the way for the others to take their experiences, learn and adapt the models to each unique market.Uplift of masses is a long-term goal for all developing countries; financial inclusion is a necessary albeit not sufficient condition for achieving this goal.

The financial empowerment of the masses can bring out a bottom up economic benefit to the economy as a whole. The BOP customers can gradually raise their economic station and uplift the economy along with them.